

(SYLLABUS)

1.

(Course Title)		(Instructor)			
(Year)	2025	(Semester)	1	(Course No.)	2150129501
(Class)	01	(Open to)	4	(Course Classification)	-
/	3.0 / 03 / 3		100	가	가
(Office)		(Telephone)	02-820-0977	(e-mail)	jisuk.hong@ssu.ac.kr
	(FL), (PBL)		+		2024
	(*) (ABEEK Classification)		(*) (ABEEK Requirement)		
(Course Description)	EUV Photolithography (Opticalproximity effect) OPC (Optical Proximity Correction)				

(Computational Lithography)	
(Optical Proximity Correction)	/ ,

가	(100)	(100%)
	100	30
	100	40
	100	20
	100	10

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(Required Texts)		
	()	* /Computational Lithography (Wiley Series in Pure and Applied Optics Book 73)/Xu Ma/Wiley/2011 * /Fundamental Principles of Optical Lithography: The Science of Microfabrication/Chris A. Mack/JW/2012 * /Resolution Enhancement Techniques in Optical Lithography/Alfred Kwok-Kit Wong/SPIE Publications/2001 * / / /2024
	<div>- , , (Zoom) .</div> <div>- Engaged Learning , 가 , " , " " 3</div> <div>- , PBL</div> <div>Engaged Learning , . (20%)</div>	
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2.

(Week)	(Keyword)	(Description)		(Texts)
01	Photolithography	o , o Photolithography		1 _part 1, part2
02	Photolithography	o Photolithography , o		2 _part 1, part2
03	Imaging	o Imaging Margin (EL, DOF) , o Resolution Enhancement Technique		3 _part 1, part2
04	Lithography simulation flow	o Lithography simulation , o (Unix Simulator OPC)		4 _part 1, part2
05	Simulation (Engaged Learning+ 1)	o Simulation Optical & Resist () , , ,		5 _part 1, part2
06	simulation (Engaged Learning+ 1)	o Simulation 2D, 3D , o Simulation result evaluation, o PBL , , PBL		6 _part 1, part2, part3
07	Optical Proximity Correction (Engaged Learning+ 2)	o OPC flow , o OPC Model (Model form, convolution, resist parameter)		7 _part 1, part2
08		o (, 가 30%)		
09	OPC Model , Calibration (Engaged Learning+ 2)	o OPC Optical Model, Resist Model Form , o OPC Model calibration		9 _part 1, part2
10	OPC Model (Engaged Learning+ 2)	o OPC compact model (PBL 1 : OPC)		10 _part 1, part2

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11	OPC Correction (Engaged Learning+ 3)	o OPC (GDS , Viewer), o OPC correction flow (Patch, Dissection, Evaluation point)	, , ,	11 _part 1, part2
12	OPC Correction recipe (Engaged Learning+ 3)	o OPC correction recipe (dissection, evaluation point) (GUI ,)	, , ,	12 _part 1, part2
13	OPC (Engaged Learning+ 3)	o OPC correction , OPC (PBL 2 : OPC Recipe)	, , ,	13 _part 1, part2
14	(PBL, Engaged Learning+ 3)	o PBL 가 (가 20%)	,	14 _part 1, part2
15		o (, 가 30%)		

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3. ()

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	Open-ended problem		
	Teamwork		
	Communication skills		